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EXAMINER	
SELLERS, DANIEL R	

ART UNIT	PAPER NUMBER
2615	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/819,679	MARKS ET AL.	
	Examiner	Art Unit	
	Daniel R. Sellers	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7,8,12,15,16,19-24 and 26-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7-8,12,15-16,19-24, and 26-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/22/06 have been fully considered but they are not persuasive. Regarding **claims 1-3, 7, 8, 19** the grounds of rejection under 35 USC 102 remain unchanged.

2. Regarding **claims 1-3 and 7-8**, the applicant states that Eyer does not anticipate the first side channel of the present invention. The examiner respectfully disagrees. Eyer teaches that data streams can be multiplexed together on one carrier frequency (Col. 4, lines 28-35), and teaches multiple real time streams are broadcast and received simultaneously (Col. 4, lines 58-64). Furthermore, Eyer teaches that the programming streams need not be on separate physical transmission channels (Col. 7, lines 7-15), and Eyer teaches a method of skipping disliked songs by staying on the same programming channels or switching programming channels (Col. 8, lines 45-48). Therefore, Eyer teaches a method of staying within the confines of a station's overall format, either by staying on the same channel, or by switching to another programming stream on the same transmission channel.

3. Regarding **claims 5, 15, 16, 20-24, and 26**, see the new grounds of rejection under 35 USC 103.

4. Regarding **claim 12**, applicant argues that "the relationship between preset buttons 166 and soft preset button labels is thus implied by proximity." In the present combination, Clayton teaches that the soft preset button labels 166 appear above the preset buttons to indicate their purpose (Col. 10, lines 12-14) and that the illustration of

Fig. 2 is one embodiment of the teachings (Col. 9, lines 4-8). The tuner changes the station by the order they are listed in the hierarchical tree, and it is implied that the tuner graphically affects the center portion of the display by showing station call letters, format, frequency, and other programming information including advertising logos (Col. 6, lines 6-11, lines 48-51, Fig. 5, Col. 10, lines 15-25, and Fig. 3, Hierarchical Channel Display). The tuner is not specifically adjacent to the portion it affects, however it is graphically linked.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1, 12, and 30-33** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. **Claim 1** recites the limitation "the provider" in line 2. There is insufficient antecedent basis for this limitation in the claim. The Office, for purposes of timely prosecution, interprets the limitation "a provider".

8. **Claim 12** recites the limitation "the top channel" in line 16. There is insufficient antecedent basis for this limitation in the claim. In line 25 and 26, the limitation "either one of the top channel and the side channel" has insufficient antecedent basis for this limitation. The Office interprets these limitations as "a top channel" and "a third portion

of the display screen describes an item being played on *either one of the top channel or a side channel,...*".

9. **Claim 30** recites the limitation "The navigation method of claim 30" in line 1, and therefore the claim does not have the antecedent basis for "the specific input device" in line 1. There is insufficient antecedent basis for this limitation in the claim. The Office interprets this claim as being dependent on claim 29.

10. **Claims 31-33** also have insufficient antecedent basis for claimed limitations for the same reasons as stated above for claim 30. The Office interprets these claims as being all dependent on claim 29.

Claim Rejections - 35 USC § 102

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. **Claims 1-3, 7 and 8** are rejected under 35 U.S.C. 102(e) as being anticipated by Eyer et al. (USPN 6588015 B1), hereafter "Eyer".

Eyer discloses a digital radio broadcast system comprising the transmission of multiple streams of content as well as manners for enable a user to alter the reproduced series of audio data.

13. Specifically regarding **Claim 1**, Eyer teaches:

A method for navigating the programming of an audio program provider ("service stream") (function of user end receiver, searching and selecting audio from service streams, col. 4, lines 1-10)

in which the provider (source of service stream, Figure 1, col. 5, lines 13-45) presents to listeners a standardized method for searching, selecting and playing programming (stream format of stream from transmitter enables receiver of Figure 2 to apply common controls, col. 6, line 8 – col. 8, line 30) wherein:

the provider (transmitter) offers a top channel (received data, such as 400 or 1040) accessible simultaneously by a plurality of listeners (modulated on RF carrier, which means stream is 'accessible' simultaneously available; also, data of 400 or 1040 can be directly or be the default output to a listener, as evidenced by 450 in view of 500 and 1060 in view of 1080; col. 10, lines 43-47; col. 12, lines 17-27; col. 16, lines 4-27),

wherein each listener receives substantially a same playlist (each customer receives streams 400 or 1040, which have an associated default order of playback, as is evidenced by sequences 450 and 1060);

a listener reacts to program items that are played on the top channel (pressing skip, like/dislike buttons, or suppress advertisements buttons, based on 'not wanting' selection or 'not satisfied with selection), a cumulative history of a listener's reactions comprising a user preference (col. 8, lines 32-61; col. 12, lines 60-67; col. 16, lines 41-45);

the provider offers an ability to create a first side channel (comprising a playback stream different from the default playback stream, as shown by 450 in view of 550 or 1060 in view of 1080)

wherein an alternate personal playlist is already prepared when the listener reacts in a first manner (e.g., 'not satisfied', col. 12, lines 60-63 or), to a program item

of the top channel (the information for 550 is known ahead of time, as data ahead of playback time are transmitted at a rate greater than playback, col. 10, lines 65-66 and col. 12, lines 17-28; and 1080 is based on known access points in a control stream, col. 15, line 58-col. 16, line 59);

the first side channel including programming that reflects a combination of a style of the provider of the selected top channel and the user preference (streams may be of type, thus audio segments are of that type, col. 7, lines 12-14; as such, the programming in a alternate channel or playback stream represents the style of the stream sequence provider by virtue of the playing of the same type, eg. jazz or classical, of audio segments, while also representing the user's preferences by virtue of the skipped, suppressed, or otherwise altered order of segments that are played back),

wherein the listener creates a personal playlist of programming in near real time during the course of listening and reacting to a channel (service stream) of the program provider (skipping, suppressing, or indicating of like/dislike influence immediate playback stream or are immediately stored for future playback alteration, col. 8, lines 45-61; col. 12, lines 24-27; col. 16, lines 42-44).

14. Regarding **Claim 2**, Eyer teaches:

the listener may immediately select either one of the top channel and the first side channel (buttons have immediate result, affecting future playback stream, col. 8, lines 45-61; col. 12, lines 24-27; col. 16, lines 42-44).

15. Regarding **Claim 3**, Eyer teaches:

wherein the listener's reaction includes a negative

response to a program item of the top channel ("dislike" or "not satisfied" or "unwanted" are noted reactions for a user in the operation of the system, col. 8, lines 34-39; col. 12, lines 60-63; col. 16, lines 25-27).

16. Regarding **Claim 7**, Eyer teaches:

the first side channel includes a preassembled playlist distinct from the playlist of the top channel in the format of the top channel (for the example of suppressed commercials or 'disliked' songs, only the disliked songs or the commercials are removed from the resulting, modified playback streams of the current programming service stream, col. 8, lines 45-48; col. 16, lines 18-21).

17. Regarding **Claim 8**, Eyer teaches:

wherein the listener reacts in the first manner to the preassembled playlist of the first side channel, (for example, user presses 'skip' indicating 'not satisfied' with current song (track E) after already pressing skip while on track D, Figure 6, col. 12, lines 37-67) and

a second side channel is already prepared when the listener reacts to program items of the first side channel, thereby refining the preassembled playlist of the first side channel to better match the user's preferences (playlist comprises tracks F-J after second skip, eliminating the remaining part of track E, Figure 6; such an order is 'already' prepared by virtue of its pre-buffering, col. 13, lines 1-8).

Claim Rejections - 35 USC § 103

18. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

19. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Eyer as applied above and in further view of Herz et al (USPN 6088722 A), hereafter "Herz".

As detailed above, Eyer discloses a system for transmitting a digital audio stream and enabling and end receiving unit to modify the playback of the received content.

20. Regarding **Claim 5**, Eyer teaches:

the program provider (source of a service stream) is an affiliate of a network of program providers (multiple sources, thus providers, may be received, col. 7, lines 9-15 and col. 14, lines 63-64)

a listener has access to distinct personal playlists on side channels of respective distinct program providers, wherein the style of a side channel is determined by the style of the top channel of the distinct program provider (different playlists on the same channel, or current programming service stream, can be accessed by virtue of automatically skipping songs, i.e. song A segues to song B then to song C versus song A segues to song C, col. 8, lines 45-48).

While the system of Eyer discloses the inclusion of other audio content in the service streams from each of the digital audio broadcast locations, Eyer does not clearly teach or suggest:

- a network operator provides guidance in methods for the program providers to assemble personal playlists

Herz discloses a system for passively constructing content channels for output to a user.

Regarding **Claim 5**, Herz, in view of the teachings other applied reference(s), at least suggests:

- a network operator (headend 502 in view of gateway network 30 of Clayton) provides guidance (by use of assembly matrices) in methods for the program providers (transmitters of Figure 1 of Eyer in view of program sources 402 in Figure 5 of Herz) to enable listeners to assemble personal playlists (headend 502 utilizes an assembly matrix for constructing virtual channels from available content, col. 9, lines 42-63 and col. 43, lines 31-65; such an agreement matrix produces alternate content that customers might most likely prefer to watch, wherein said alternate content is offered on a separate channel distinct from the standard network broadcast, col. 26, lines 3-67, col. 27, lines 1-10, col. 28, lines 3-18; use of such assembly matrices to suggest alternate content is taken at least in view of alternate content E provided for a user in Eyer from a service stream, col. 17, lines 22-29; Herz notes that virtual radio channels may be created with the disclosed system, col. 52, lines 30-39 and that likes/dislikes may be incorporated in establishing the system, col. 34, lines 54-57).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to modify the service program sources in the system of Eyer to incorporate or be associated with a headend or feedback system comprising the assembly matrix circuitry of the system of Herz. The motivation behind such a modification would have been that such a system would have at least enabled the

content most likely to be preferred by a user to be selected as alternate content in the system of Eyer. Providing alternate, desirable content would have enabled a service stream provider to minimize the chances of an end user changing stations, as is generally known in the art, and further evidenced by the teachings of Chan (col. 3, lines 42-45).

21. **Claims 12 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Clayton et al (USPN 6725022 B1) in view of Chan (USPN 6600908 B1).

Clayton discloses an multi-format radio device and corresponding network.

22. Specifically regarding **Claim 12**, Clayton teaches:

A method of navigation (operation of device 20) the programming of an audio program provider (selected station) affiliated with a network (defined by sources commonly received by 20) of other providers (all sources/stations received by 20)(col. 5, line 65-col. 6, line 11; col. 9, line 1 – col. 10, line 45) wherein:

a standardized control device (20, comprising display 160 and buttons 166,164,172,174) is used to search, select and play programming of the providers (see for example, col. 9, lines 20-51), the providers being the operators of stations (channel corresponds to station, col. 9, lines 49-51);

the control device includes a display screen (160) to assist a listener in navigating programming (shows hierarchical tree for browsing and selecting stations, col. 9, lines 13-21);

the display screen includes distinct portions dedicated for displays of specific types of information about the programming (hierarchical tree portion discloses category, col. 9, lines 40-51; other portion shows information about selected channel, including station call letters, Figure 2), the respective portions of the display (tree and selected portions, Figure 2) screen being used in a common manner among a majority of affiliated providers of the network (right side shows selected channel info, channels may be from AM,FM, internet, etc., organized by format, col. 6, lines 1-11 and 45-54; col. 9, lines 21-29);

a first portion of the display screen describes a category of the program material (selection channel portion shows station format, Figure 2), a second portion of the display (hierarchical) screen describes a station (hierarchical at least describes station call letters and advertising logos, col. 9, lines 40-51), and a third portion of the display screen describes an item being played on the top channel (inherent with respect to col. 4, lines 30-50 and col. 11, lines 9-21, wherein it is well-known that devices, such as those discussed in col. 4, have displays for artist name and track name), each of the three portions of the display screen comprising a non-changing location (inherent that the hierarchical channel display has fixed display resolution)

the control device includes at least three distinct input devices (one tuner (164), one up, down, back, fwd channel selector (162), and one preset button (166)), each distinct input device graphically linked to a non-changing location on the display screen (wherein the linked buttons and knobs graphically affect the hierarchical display when actuated, col. 9, line 14 - col. 10, line 14); and

While the system of Clayton discloses the reception of a channel from a station, col. 9, lines 49-51, Clayton does not clearly teach or suggest:

- the listener being able to immediately select either one of the top channel and the side channel.

Chan discloses a system for enabling a single broadcast location to emit multiple streams of audio information.

Specifically regarding **Claim 12**, Chan, in view of the teachings of Clayton applied above, teaches or at least suggests:

the listener being able to immediately select either one of the top channel and the side channel (can switch to on-demand 'anytime' user wishes, col. 3, lines 33-39).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to utilize the on-demand style of transmission and associated controls as part of the channel transmission and reception in the system of Clayton, as is taught for the transmission and reception in the system of Chan. The motivation behind such a modification would have been that providing such alternate programming and corresponding access to said programming would have enabled a broadcast station to eliminate the need for a user to switch to a competing broadcast station to receive occasionally desired information. For a user, such a system would have enabled the reception of programming at anytime, including particular times of interest for said programming or information.

23. Regarding **Claim 19**, Clayton, in view of the teachings other applied reference(s), at least suggests:

the side channel (on demand material of Chan) includes a personalized playlist that is unique to the user (on-demand material of Chan, such as traffic, in view of ability to transmit personalized event information, such as traffic information based on user location, in Clayton, col. 12, lines 8-14; stock information may also be personalized in system of Clayton, taken in view of desirability of stock reports in system of Chan, col. 1, lines 33-42).

24. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Clayton in view of Chan as applied above, and in further view of Lear et al. (USPN 3478973) (hereinafter Lear) and McGeorge (USPN 4636621).

As detailed above, Clayton discloses a system for receiving and navigating a plurality of channels of information, which Chan discloses a system for transmitting multiple sets of information from one broadcast location.

While both Clayton and Chan disclose tuner controls, Clayton in view of Chan do not clearly teach or suggest:

wherein the first input device is a rotatable dial and the graphic link to a non-changing location on the display comprises a pointer printed on the control device housing.

However, rotatable dials, particularly for tuning purposes were well-known in the art at the time of invention, as is at least evidenced by the teachings of Lear.

25. Specifically regarding **Claim 15**, Lear teaches:

wherein at least the first input device (104 of Chan in view of Fig. 25, items 50,51, 55, and 56 of Lear) is a rotatable dial (col. 3, lines 49-72)

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to at least use a dial for the tuner control input component in the system of Clayton in view of Chan, as is taught by Lear. The motivation behind such a modification would have been that such a rotatable dial enables selection from a plurality of selections to be made based on a single manipulation, rather than a number of repeated manipulations.

While the combination of Clayton, Chan, and Lear disclose tuner controls, Clayton and Chan in view of Lear do not clearly teach or suggest:

the graphic link to a non-changing location on the display comprises a pointer printed on the control device housing.

McGeorge teaches an oven rotatable switch (Fig. 1, item 27, and Col. 4, lines 20-22) and a graphical link comprising a pointer on the control device housing (Fig. 4, item 27B, and Col. 11, lines 28-36). It is obvious to one of ordinary skill that the pointers used in various embodiments (i.e. Fig. 4 and Fig. 5) graphically link the pertinent controls to a non-changing location to enable a user to quickly associate a control with its inherent function. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Clayton, Chan, Lear, and McGeorge for the purpose of better usability.

26. **Claims 16, and 29-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Clayton, Chan, Lear, and McGeorge as applied above, and in further view of Kaneko et al. (USPN 4464781) (hereinafter Kaneko).

27. Regarding **claim 16,** as detailed above, the combination teaches the features of the parent claim 15. Lear teaches a rotatable dial positioned coaxially around the dial of the first input device (Fig. 1, items 55 and 56) and McGeorge teaches a pointer printed on a housing to distinguish several rotatable controls link to different non-changing portions of the display screen. While the combination suggests these features, they are silent on a dial color of each of the first and second input devices matching its respective printed pointer.

Kaneko teaches color coding knobs for indicating which of the control knobs correspond to which channel of audio data (i.e. one color for a left channel and another for a right channel) (see abstract). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Clayton, Chan, Lear, McGeorge, and Kaneko for the purpose of ease of operation (Col. 2, lines 16-28).

28. Regarding **claim 29**, the combination of Clayton, Chan, Lear, McGeorge, and Kaneko teaches a method of navigation of the programming of an audio program provider wherein a standardized control device is used to search, select, and play items of a playlist. See the preceding argument with respect to claims 16. The combination teaches a control device, which includes a display with these features. The combination also teaches a pointer printed on the housing with these features.

29. Regarding **claim 30**, the combination teaches the benefits of a rotatable dial and color coding.

30. Regarding **claim 31**, the combination teaches multiple rotatable dials and multiple pointers printed on a housing.

31. Regarding **claim 32**, see the preceding argument with respect to claim 30. The combination teaches at least two colors for two different controls.

32. Regarding **claim 33**, see the preceding argument with respect to claim 16. The combination teaches a second dial coaxially located around a first dial.

33. **Claims 20-24, and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyer in view of Clayton, McGeorge, and Janky (USPN 5914941).

34. Regarding **claim 20**, the combination of Eyer, Clayton, McGeorge, and Janky teaches a method of navigation of the programming of a distinct station of an audio program provider affiliated with a network of other providers wherein:

Eyer teaches the audio program providers offer information that is of interest to users, including a top channel of each provider comprising a default playlist of information comprising distinct playlist items that are played sequentially on an audio device (Col. 4, lines 1-10, lines 28-35, lines 58-64, Col. 7, lines 7-15, and Col. 8, lines 32-48);

Eyer does not teach the features, including:

- a standardized control device is used to search, select and play programming of the providers, the control device including a display screen to assist a listener in navigating programming
- the control device operates in a substantially common manner when used to play programming of stations affiliated with the network.

Clayton, however, teaches that the providers (see for example, col. 9, lines 20-51), the control device including a display screen to assist a listener in navigating programming (Fig. 2, 160 for displaying a hierarchical tree for browsing and selecting stations, col. 9, lines 13-21);

the control device operates in a substantially common manner when used to play programming of stations affiliated with the network (Clayton, a plurality of sources may be from AM,FM, internet, etc., all are organized by format, col. 6, lines 1-11 and 45-54; col. 9, lines 21-29);

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Eyer and Clayton for the purpose of user friendly operations (Col. 6, lines 1-11).

However, beyond the personalization of information services, neither Eyer or Clayton teach or clearly suggest printed information, including:

- a pointer printed on the control device housing indicates the playlist item that is currently being played

In view of McGeorge, it would be obvious to provide a pointer printed on the control device housing indicates the playlist item that is currently being played. In a

similar user interface, McGeorge teaches an oven rotatable switch (Fig. 1, item 27, and Col. 4, lines 20-22) and a graphical link comprising a pointer on the control device housing (Fig. 4, item 27B, and Col. 11, lines 28-36). Eyer teaches that a song id button (242) recovers identification of the current playing playlist item (Col. 7, lines 22-30). It is obvious to one of ordinary skill that the pointers used in various embodiments (i.e. Fig. 4 and Fig. 5) graphically link the pertinent controls to a non-changing location to enable a user to quickly associate a control with its inherent function. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Eyer, Clayton, and McGeorge for the purpose of better usability.

The combination does not teach or clearly suggest the simultaneously skipping a current item and saving for later use, including:

- the control device incorporates two modify control buttons, each button acting upon the currently playing playlist item, the first button acting to delete the item and the second button acting simultaneously skip the current playing item and save it for use in an alternate playlist;
- the modify control buttons being graphically associated with each other and with the playlist item that is currently being played;

Eyer does teach a control device, which incorporates at least two control buttons. A first control button deletes the currently playing playlist item and a second button indicates a favorite track to be played currently and played when rebroadcast (Col. 8, lines 32-61). Clayton teaches modify control buttons, which are graphically associated with each other and with the playlist item currently being played (Col. 10, lines 26-36).

However, Eyer, Clayton, and McGeorge do not teach that the second button simultaneously skips the current playing item and saves it for use in an alternate playlist.

Janky teaches a digital recorder, and further teaches that a user would like to save a song for playback later at their discretion (Col. 1, lines 37-46, Col. 6, lines 21-29, and lines 60-65). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Eyer, Clayton, McGeorge, and Janky for the purpose of user convenience. One skilled in the art at the time of the invention would appreciate that the "love it" button can save a song for later playback at their discretion, so that a user can browse the available songs on the current radio station.

35. Regarding **Claim 21**, Eyer, in view of the teachings other applied reference(s), at least suggests:

the control device incorporates a station selector (238 in view of controller 162 of Clayton)(col. 9, lines 14-51 – though it is noted that the elements in this limitation appear as if they should be reversed), and

the station selector (238) is used to search and select the stations of affiliated providers of information (stations commonly available to receiver of Figure 2; col. 7, lines 1-7).

36. Regarding **Claim 22**, Eyer, in view of the teachings other applied reference(s), at least suggests:

a channel selector (skip or channel suppression buttons, col. 12, lines 17-27; col. 16, lines 41-42) which operates at a level below the station selector to search and select

playlists of information within a selected station (skip and channel suppress operate on same selected channel, see Figures 5 or 10).

37. Regarding **Claim 23**, Clayton, in view of the teachings other applied reference(s), at least suggests:

wherein a portion of the display screen is dedicated (designated by circuitry operating display 160) to display an (identity Call letters) of the station (selected channel)(selected channel portion that actually or specifically shows the call letters in Figure 2 of Clayton), and

a further portion of the display screen is dedicated (designated by circuitry operating display 160) to identify a type of information that is being audibly played (categories in hierarchical tree portion of Clayton, col. 9, lines 30-51).

38. Regarding **Claim 24**, Clayton, in view of the teachings other applied reference(s), at least suggests:

an additional further portion of the display screen is dedicated (designated by circuitry operating display 160) to specifically identify the information that is being audibly played (explicit portion of 'selected channel display of Figure 2 of Clayton that shows 'programming information', wherein such information is noted by Clayton to include a program listing, col. 11, lines 9-14; Eyer also discloses the use of a display 262 to show song identifications, col. 7, lines 22-25; 'dedicated', as applied in the present claim language, does not obviate the application of the references of Clayton and Eyer, as the broadest reasonable interpretation of said term does not establish limitations on the nature (such as duration, timing) of such dedication; it is also further

noted that Lehr suggests dedicated portions for display of such information, by virtue of distinct screens, though said reference is not explicitly relied upon herein).

39. Regarding **claim 28**, Eyer teaches that data, such as the selection name or artist, can be heard verbally, and a button causes the information to be read to the user (Col. 6, lines 40-44 and Col. 7, lines 22-30).

40. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Eyer, Clayton, McGeorge, and Janky as applied to claim 20 above, and further in view of Herz.

Eyer discloses a digital radio broadcast system comprising the transmission of multiple streams of content as well as manners for enable a user to alter the reproduced series of audio data.

41. Specifically regarding **Claim 26**, Eyer teaches:

A method for navigating the programming of a distinct station (default, or commercial free) of an audio program provider (transmitter of 12 of "service stream") affiliated with a network of other stations (function of user end receiver, searching and selecting audio from service streams, col. 4, lines 1-10; multiple streams may be received and thus are 'affiliated' by virtue of their common reception, col. 14, lines 63-64)

the station (transmitter) offers a top channel (received data, such as 400 or 1040) accessible simultaneously by a plurality of listeners (modulated on RF carrier, which means stream is 'accessible' simultaneously available; also, data of 400 or 1040 can be

directly or be the default output to a listener, as evidenced by 450 in view of 500 and 1060 in view of 1080; col. 10, lines 43-47; col. 12, lines 17-27; col. 16, lines 4-27),

wherein each listener receives substantially a same playlist (each customer receives streams 400 or 1040, which have an associated default order of playback, as is evidenced by sequences 450 and 1060);

a listener reacts to a program item that is played on the top channel by means of modify control buttons incorporated in a control device, the modify control buttons being distinct from channel, station, and category selection dials (Eyer, col. 8, lines 32-61; Clayton, col. 9, lines 14-17; and col. 10, lines 12-14 and lines 26-36);

a first button acts to delete the item, a second button acts to simultaneously skip the item and save it on a personalized playlist (Janky, col. 1, lines 37-46, col. 6, lines 21-29, lines 60-65; Eyer, col. 8, lines 32-61);

a cumulative history of a listener's reactions comprising a user preference (Eyer, col. 8, lines 32-61; col. 12, lines 60-67; col. 16, lines 41-45);

the station offers an ability to create a first side channel (Eyer, comprising a playback stream different from the default playback stream, as shown by 450 in view of 550 or 1060 in view of 1080), wherein an alternate personal playlist is already prepared when the listener reacts (e.g., 'not satisfied', col. 12, lines 60-63 or), to a program item of the top channel (the information for 550 is known ahead of time, as data ahead of playback time are transmitted at a rate greater than playback, col. 10, lines 65-66 and col. 12, lines 17-28; and 1080 is based on known access points in a control stream, col. 15, line 58-col. 16, line 59), the listener is automatically switched from a top channel to

the side channel when the listener reacts to the program item of the top channel (for 'dislike' indication, future occurrences of program item are automatically skipped, col. 8, lines 42-48; for skip, remaining part of program item is passed, col. 12, lines 24-27; for suppressing of commercials, the playback of a commercial may also automatically occur when a user has indicated a preference for audio programs by the associated button, col. 16, lines 41-45), both the top channel and the side channel being immediately accessible to a listener after the side channel is created (data is received at a rate greater than playback, and thus may be accessed immediately upon reception by skipping, as is indicated by Eyer, col. 10, lines 65-678; col. 13, lines 1-8; col. 19, lines 11-31);

the first side channel including programming that reflects a combination of a style of the station (stream) that offers the selected top channel, and the user preference (streams may be of type, thus audio segments are of that type, col. 7, lines 12-14; as such, the programming in a alternate channel or playback stream represents the style of the stream sequence provider by virtue of the playing of the same type, eg. jazz or classical, of audio segments, while also representing the user's preferences by virtue of the skipped, suppressed, or otherwise altered order of segments that are played back), wherein the listener creates a personal playlist of programming in near real time during the course of listening and reacting to a channel (service stream) of the station (each of skipping, suppressing, or indicating of like/dislike serve to influence immediate playback stream or are immediately stored for future playback alteration, col. 8, lines 45-61; col. 12, lines 24-27; col. 16, lines 42-44).

a network operator provides guidance methods for the stations to enable listeners to assemble personal playlists (Clayton, fig. 5, col. 14, lines 15-19), a listener has access to distinct personal playlists on side channels of respective distinct program providers (channels can provide different types of music, such as jazz and classical; as such, skipping, suppressing, or indicating a song as disliked, would at least result in a different playback stream for each of the provided service streams, as the involved audio content would be of a different genre; col. 7, lines 12-14).

While the combination of Eyer, Clayton, McGeorge, and Janky discloses that a plurality of streams (and thus implicitly, channels from stations) may be received, the combination does not clearly teach or suggest:

- a network operator provides guidance in methods for the station to enable listeners to assemble personal playlists

Herz discloses a system for passively constructing content channels for output to a user.

Regarding **Claim 26**, Herz, in view of the teachings other applied reference(s), at least suggests:

- a network operator (headend 502 in view of gateway network 30 of Clayton) provides guidance (by use of assembly matrices) in methods for the station to enable listeners to assemble personal playlists (headend utilizes an assembly matrix for constructing virtual channels from available content, col. 9, lines 42-63 and col. 43, lines 31-65; such an agreement matrix produces alternate content that customers might most likely prefer to watch, wherein said alternate content is offered on a separate

channel distinct from the standard network broadcast, col. 26, lines 3-67, col. 27, lines 1-10, col. 28, lines 3-18; use of such assembly matrices to suggest alternate content is taken at least in view of alternate content E provided for a user in Eyer, col. 17, lines 22-29; Herz notes that virtual radio channels may be created with the disclosed system, col. 52, lines 30-39 and that likes/dislikes may be incorporated in establishing the system, col. 34, lines 54-57).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to modify the service program sources in the system of Eyer in view of Clayton, McGeorge, and Janky to incorporate or be associated with a headend or feedback system comprising the assembly matrix circuitry of the system of Herz. The motivation behind such a modification would have been that such a system would have at least enabled the content most likely to be preferred by a user to be selected as alternate content in the system of Eyer in view of Clayton, McGeorge, and Janky. Providing alternate, desirable content would have enabled a service stream provider to minimize the chances of an end user changing stations, as is generally known in the art, and further evidenced by the teachings of Chan (col. 3, lines 42-45).

42. **Claims 27 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Clayton, Chan, Lear, McGeorge, and Kaneko as applied to claim 16 above, and further in view of Eyer.

43. Regarding **claim 27**, the combination of Clayton, Chan, Lear, McGeorge, and Kaneko teaches the features of claim 12, the parent claim. However, the combination

does not teach the feature wherein the control device incorporates a button that causes information on the screen to be spoken to the listener. Eyer teaches that data, such as the selection name or artist, can be heard verbally, and a button causes the information to be read to the user (Col. 6, lines 40-44 and Col. 7, lines 22-30). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Clayton, Chan, Lear, McGeorge, Kaneko, and Eyer for the purpose of safety. One skilled in the art at the time of the invention can appreciate that a driver of an automobile needs to remain alert and focused during the vehicles operation, and a verbal output versus a visual output has the ability to be less distracting, which can lead to safer operation of the vehicle.

44. Regarding **claim 34**, see the preceding argument with respect to claim 27. The combination teaches these features.

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee, USPN 5,671,195 - teaches a conventional car radio cassette faceplate (Fig. 1);

Allport, USPN 6,104,334 - teaches graphical links between buttons and labels (Figs. 3-13, and 17); and

Richards, Design Patent US 430,562 - teaches another possible configuration of controls.

46. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS

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